### PATENT COOPERATION TREATY

	From the INTERNATIONAL BUREAU		
PCT	То:		
NOTIFICATION OF ELECTION  (PCT Rule 61.2)  Date of mailing (day/month/year)  07 February 2001 (07.02.01)	Commissioner US Department of Commerce United States Patent and Trademark Office, PCT 2011 South Clark Place Room CP2/5C24 Arlington, VA 22202 ETATS-UNIS D'AMERIQUE in its capacity as elected Office		
International application No.	Applicant's or agent's file reference		
PCT/US00/17637	CM2340/2B		
International filing date (day/month/year)	Priority date (day/month/year)		
27 June 2000 (27.06.00)	28 June 1999 (28.06.99)		
Applicant			
EVANS, Erica, Louise et al			
The designated Office is hereby notified of its election made    X   in the demand filed with the International Preliminary 27 December 2	Examining Authority on: 2000 (27.12.00) ational Bureau on:		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Pascal Piriou

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant'	s or ac	ent's file reference		2 1 10	·	
CM2340			FOR FURTHER ACTION	<b>~NI</b>	cation of Transmittal of Internati y Examination Report (Form Po	
Internation	nal app	lication No.	International filing date (day/	month/year)	Priority date (day/month/yea	ar)
PCT/US	300/17	7637	27/06/2000		28/06/1999	
Internation A61K7/5		ent Classification (IPC) or na	tional classification and IPC			
	ЮСТ	ER & GAMBLE COMPA	ANY et al.			· · · · · ·
1. This and i	intern is tran	ational preliminary exami smitted to the applicant a	nation report has been pre ccording to Article 36.	pared by this Inte	ernational Preliminary Exam	nining Authority
2. This	REPO	ORT consists of a total of	7 sheets, including this co	er sheet.		
ŀ	been a	amended and are the bas	d by ANNEXES, i.e. sheets is for this report and/or she or of the Administrative Inst	ets containing re	on, claims and/or drawings vectifications made before thine PCT).	which have is Authority
Thes	e ann	exes consist of a total of	sheets.			
3. This	report	contains indications relat	ting to the following items:			
1	$\boxtimes$	Basis of the report				
Ш		Priority				
Ш	$\boxtimes$	Non-establishment of or	pinion with regard to novelty	, inventive step	and industrial applicability	
IV		Lack of unity of invention				
V	⊠	Reasoned statement un citations and explanatio	der Article 35(2) with regar ns suporting such stateme	d to novelty, inve	entive step or industrial appl	licability;
VI		Certain documents cite				
VII	$\boxtimes$	Certain defects in the in	ternational application			
VIII	×	Certain observations on	the international application	n		
Date of sub	omissic	on of the demand	Da	e of completion of	this report	
27/12/20	00		12.	07.2001		
	exami Euro	gaddress of the international ning authority: . pean Patent Office 298 Munich		horized officer		STORY SOLD WITHOUT THE PROPERTY OF THE PROPERT
ارو		+49 89 2399 - 0 Tx: 523656	epmu d Hil	lebrecht, D		
Fax: +49 89 2399 - 4465						

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/17637

I.	Ba	sis of th	rep rt
1.	the and	receiving d are not	to the <b>elements</b> of the international application (Replacement sheets which have been furnished to go Office in response to an invitation under Article 14 are referred to in this report as "originally filed" annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)): n, pages:
	1-3	6	as originally filed
	Cla	ims, No.	· :
	1-1	0	as originally filed
2.	Witl lanç	h regard t guage in v	to the <b>language</b> , all the elements marked above were available or furnished to this Authority in the which the international application was filed, unless otherwise indicated under this item.
	The	se eleme	ents were available or furnished to this Authority in the following language: , which is:
		the lang	guage of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
		the lang	guage of publication of the international application (under Rule 48.3(b)).
			guage of a translation furnished for the purposes of international preliminary examination (under Rul d/or 55.3).
3.	With inte	n regard t rnational	to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application, the preliminary examination was carried out on the basis of the sequence listing:

furnished subsequently to this Authority in written form.
furnished subsequently to this Authority in computer readable form.
The statement that the subsequently furnished written sequence listing does not go beyond the disclosure i the international application as filed has been furnished.
The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

☐ contained in the international application in written form.

 $\hfill \Box$  filed together with the international application in computer readable form.

	the drawings,	sheets
	the claims,	Nos.:
Ш	the description,	pages:

5. 

This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6.	Add	ditional observations, if n	ecessa	ry:	
III.	Nor	n-establishment of opir	nion wit	h regard	to novelty, inventive step and industrial applicability
	The	questions whether the o	claimed y applic	invention able have	a appears to be novel, to involve an inventive step (to be non- e not been examined in respect of:
	×	claims Nos. 10.			
be	caus	se:			
	⊠	the said international ap not require an internation see separate sheet			said claims Nos. 10 relate to the following subject matter which does examination ( <i>specify</i> ):
		the description, claims of that no meaningful opin			cate particular elements below) or said claims Nos. are so unclear ned (specify):
		the claims, or said claim could be formed.	ns Nos.	are so in	adequately supported by the description that no meaningful opinion
		no international search	report h	as been	established for the said claims Nos
	A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:				
		the written form has not	been fu	ırnished d	or does not comply with the standard.
		the computer readable f	orm has	s not bee	n furnished or does not comply with the standard.
V.	Rea citat	soned statement under	r Article	e 35(2) w rting suc	ith regard to novelty, inventive step or industrial applicability;
1.	Stat	ement			
	Nov	elty (N)	Yes: No:	Claims Claims	4,7 1-3,5,6,8-10
	Inve	ntive step (IS)	Yes: No:	Claims Claims	1-10
	Indu	strial applicability (IA)	Yes:	Claims	1-9

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/17637

No: Claims

2. Citations and explanations see separate sheet

### VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

### VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made: see separate sheet

### INTERNATIONAL PRELIMINARY **EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/17637

Reference is made to the following documents:

D1: US-A-5 804 205 (EPSTEIN ET AL.) 8 September 1998 cited in the application

D2: EP-A-0 780 116 (SHISEIDO COMPANY LIMITED) 25 June 1997

D3: WO 98 52530 A (THE PROCTER & GAMBLE COMPANY) 26 November 1998

D4: WO 99 27904 A (JOHNSON & SON INC.) 10 June 1999 cited in the application

D5: WO 97/39733 A (THE PROCTER & GAMBLE COMPANY) 30 October 1997

III. For the assessment of the present claim 10 on the question whether it is industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.

Claim 10 relates to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of this claim (Article 34(4)(a)(i) PCT).

- V. The subject-matter of the present claims is neither new nor involves an inventive step, in contrast to Article 33(1) to (3) PCT.
- 1. Present claim 1 claims a cosmetic composition comprising a quaternary ammonium agent and a tocopherol based anti-oxidant.
- 2. D1 discloses compositions comprising a quaternary ammonium compound and vitamin E as an anti-oxidant. (D1, claim 1, column 4, lines 33 to 41 and example) The compositions are applied to the skin. Similar compositions are also already known from D2, cf. D2, claim 1, where the betaine (e.g. trimethylglycine) must be regarded as a quaternary ammonium compound.
- The present application is directed to the problem of providing compositions giving 3. the benefits of tocopherol derivatives without showing negative side-effects. The



# INTERNATIONAL PRELIMINARY International application No. PCT/US00/17637 EXAMINATION REPORT - SEPARATE SHEET

problem can be overcome by adding a quaternary ammonium compound to the composition.

It is submitted that the problem, if there is any, only can be solved when a considerable amount of quats is present. However, the application even includes composition comprising solely minor amounts. The subject-matter of the claims thus cannot be regarded as inventive within the entire scope of the claims.

Moreover, a huge number of cosmetic products comprise cationic surfactants/ emulsifiers, which are generally quaternary ammonium compounds. Furthermore, tocopherol antioxidants are also well known as a conventional additive for skin care products, see e.g. D3, page 40 and D5, page 33. The skilled worker, who would like to add quaternary ammonium compounds in order to take the advantages of such compounds (cf. D2 to D4) would formulate respective compositions without involving an inventive step.

Applicants did not show that there is any unexpected advantage by combining both components. Nevertheless, even if there was such an advantage, an inventive step could not be acknowledged, since the combination of both components in a skin care composition would appear to be very obvious due to the known advantages of both components.

4. The subject-matter of the dependent claims is either already known from D1 and D2 or at least obvious to those skilled in the art.

#### VII.

- 1. Compounds of formulae (IV), (V), and (VIII) on pages 8 and 9, respectively, do not reflect ammonium compounds.
- 2. Obviously the names of the compounds on page 12 are not correct. Apparently these compounds should be regarded as "esterquats". However, e.g. the term "canolyl-oxy" reflects an alkyloxy group rather than an acyloxy (ester) group.
- 3. The documents EP-A-789 076 and US-A-5880289 cited on pages 2 and 36, respectively, are apparently not directed to the field of cosmetics or to a related technical field.

## **INTERNATIONAL PRELIMINARY**

International application No. PCT/US00/17637

**EXAMINATION REPORT - SEPARATE SHEET** 

VIII. The vague and imprecise statement in the description on page 27 "spirit of the invention" implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them (see also the PCT Guidelines, III-4.3a).

### T COOPERATION TREATY

# **PCT**

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference		Transmittal of International Search Report				
CM2340/2B	ACTION (Form PCT/ISA/220) as well as, where applicable, item 5 below.					
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/US 00/17637	27/06/2000	28/06/1999				
Applicant						
THE PROCTER & GAMBLE COMP	ANY et al.					
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Auth ansmitted to the International Bureau.	ority and is transmitted to the applicant				
This International Search Report consists	of a total of sheets.					
	a copy of each prior art document cited in this	report.				
Basis of the report						
	international search was carried out on the bas less otherwise indicated under this item.	is of the international application in the				
the international search w Authority (Rule 23.1(b)).	ras carried out on the basis of a translation of th	ne international application furnished to this				
b. With regard to any <b>nucleotide an</b> was carried out on the basis of the		ternational application, the international search				
	onal application in written form.					
l = '	ernational application in computer readable form this Authority in written form.	1.				
	this Authority in computer readble form.					
	osequently furnished written sequence listing do	pes not go beyond the disclosure in the				
the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished						
Certain claims were fou	nd unsearchable (See Box I).					
3. Unity of invention is lacking (see Box II).						
4. With regard to the title,						
the text is approved as su	the text is approved as submitted by the applicant.					
	thed by this Authority to read as follows:	MONTHIM COMPOUND AND TOCOPHEROL				
COSMETIC COMPOSITIONS CONTAINING A QUATERNARY AMMONIUM COMPOUND AND TOCOPHEROL						
5. With regard to the <b>abstract,</b> X  the text is approved as submitted by the applicant.						
the text has been establis	shed, according to Rule 38.2(b), by this Authorite date of mailing of this international search rep					
6. The figure of the <b>drawings</b> to be publ	lished with the abstract is Figure No.					
as suggested by the appli	icant.	None of the figures.				
because the applicant fail	ed to suggest a figure.					
because this figure better	characterizes the invention.					

## INTERNATIONAL SEARCH REPORT

Application No PCT/00/17637

Relevant to claim No.

1-3,5,6,

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K7/50 A61K7/00

C. DOCUMENTS CONSIDERED TO BE RELEVANT

A61K7/48

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

χ

Minimum documentation searched (classification system followed by classification symbols)  $IPC\ 7\ A61K$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

Citation of document, with indication, where appropriate, of the relevant passages

US 5 804 205 A (EPSTEIN ET AL.)

WPI Data, PAJ, EPO-Internal, CHEM ABS Data

8 September 1998 (1998-09-08) cited in the application claims 1-4; table 1 column 4, line 39 - line 41		9,10		
X EP 0 780 116 A (SHISEIDO COMPA 25 June 1997 (1997-06-25) page 19 page 20 page 25	ANY LIMITED)	1,2,5,6, 9,10		
Surface decomposite and listed in the continuation of box C	Patent familiu members are licted	in approx		
Further documents are listed in the continuation of box C.	Patent family members are listed	ın annex.		
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another</li> </ul>	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> </ul>			
citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or	"Y" document of particular relevance; the cannot be considered to involve an indocument is combined with one or many	ventive, step when the ore other such docu-		
other means "P" document published prior to the international filing date but later than the priority date claimed	ments, such combination being obvio in the art. "&" document member of the same patent	•		
Date of the actual completion of the international search	Date of mailing of the international se	arch report		
19 October 2000	25/10/2000			

Name and mailing address of the ISA

Regional State (SA) (1988) Report of the Control of

Alvarez Alvarez, C

Authorized officer

# INTERNATIONAL SEARCH REPORT

PCT Application No.

C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 98 52530 A (THE PROCTER & GAMBLE COMPANY) 26 November 1998 (1998-11-26) claims 1,9; example 2 page 39, line 32 -page 40, line 17 page 42, line 12 -page 44, line 5 page 5, line 18 -page 8, line 15	1,2,4-6, 9,10 3,7,8
	<del></del>	
Y	WO 99 27904 A (S.C.JOHNSON & SON INC.) 10 June 1999 (1999-06-10) cited in the application table 1 page 11, line 10 - line 22 page 12, line 5 - line 21	3
Y	WO 97 39733 A (THE PROCTER & GAMBLE COMPANY) 30 October 1997 (1997-10-30) example 1 page 19, line 19 - line 29 page 9, line 27 page 5, line 33 -page 8, line 34	7
Υ	WO 96 03970 A (WITCO CORPORATION) 15 February 1996 (1996-02-15) page 1, line 4 - line 6 page 3, line 7 - line 24 page 7, line 27 -page 9, line 25 page 16 "Formulation 1-1" page 27 "Formulation 3-3" page 28 "Formulation 3-4" claims 12-21	7
Y	WO 98 46199 A (CAPSULIS) 22 October 1998 (1998-10-22) claims 5-7; examples 1,9 page 6, line 29 -page 8, line 13	8
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## INTERNATIONAL SEARCH REPORT

Informati patent family members

PCT Application No

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	it document search report		Publication date	_	Patent family member(s)		Publication date
115 58	304205		08-09-1998	AU	7462396	Δ	10-09-1997
05 50	304203	^	00 05 1550	CA	2247381		28-08-1997
			•	WO	9730679		28-08-1997
EP 78	30116	Α	25-06-1997	US	6008246		28-12-1999
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				AU	7074898	Α	11-12-1998
	· .			CN	1261780	T	02-08-2000
				EP	0983047		08-03-2000
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WO 97	 739733	 А	30-10-1997	AU	3114697	 A	12-11-1997
				AU	3115097		12-11-1997
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				CN	1219871		16-06-1999
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				JP	11508281		21-07-1999
				WO.	9739734		30-10-1997
				US	5939082		17-08-1999
WO 96	603970	Α	15-02-1996	US	5552137		03-09-1996
				AU	689940		09-04-1998
				AU	3214495		04-03-1996
				BR	9508862		16-09-1997
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				CN	1158560		03-09-1997
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				US	5610187	Α	11-03-1997
MO 08	 846199	Α	22 <b>-</b> 10-1998	FR	2761912	Α	16-10-1998
			22 10 1330	AÜ	7340798		11-11-1998
WO 30				A11	/.)411/90	M	

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K7/50 A61K7/00

A61K7/48

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, CHEM ABS Data

	INTS CONSIDERED TO BE RELEVANT	<del></del>
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 804 205 A (EPSTEIN ET AL.) 8 September 1998 (1998-09-08) cited in the application claims 1-4; table 1 column 4, line 39 - line 41	1-3,5,6, 9,10
X	EP 0 780 116 A (SHISEIDO COMPANY LIMITED) 25 June 1997 (1997-06-25) page 19 page 20 page 25	1,2,5,6, 9,10
	-/	

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family
Date of the actual completion of the international search  19 October 2000	Date of mailing of the international search report 25/10/2000
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Alvarez Alvarez, C

	ntion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
,	WO 98 52530 A (THE PROCTER & GAMBLE COMPANY) 26 November 1998 (1998-11-26) claims 1,9; example 2 page 39, line 32 -page 40, line 17 page 42, line 12 -page 44, line 5 page 5, line 18 -page 8, line 15	1,2,4-6, 9,10 3,7,8
,	WO 99 27904 A (S.C.JOHNSON & SON INC.) 10 June 1999 (1999-06-10) cited in the application table 1 page 11, line 10 - line 22 page 12, line 5 - line 21	3
,	WO 97 39733 A (THE PROCTER & GAMBLE COMPANY) 30 October 1997 (1997-10-30) example 1 page 19, line 19 - line 29 page 9, line 27 page 5, line 33 -page 8, line 34	7
	WO 96 03970 A (WITCO CORPORATION) 15 February 1996 (1996-02-15) page 1, line 4 - line 6 page 3, line 7 - line 24 page 7, line 27 -page 9, line 25 page 16 "Formulation 1-1" page 27 "Formulation 3-3" page 28 "Formulation 3-4" claims 12-21	7
Y	WO 98 46199 A (CAPSULIS) 22 October 1998 (1998-10-22) claims 5-7; examples 1,9 page 6, line 29 -page 8, line 13	8

2



Int Ional Application No PCT/US 00/17637

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			AU	7340798 A	11-11-1998
			EP	0975307 A	02-02-2000